

ABSTRACT

The present invention relates to a method for acyltransferase reaction in which an acyl group of acyl coenzyme 5 A is transferred to an acyl group receptor characterized in that the reaction is carried out by production and/or reproduction of acyl coenzyme A from coenzyme A in a reaction system by a chemical thioester exchange reaction with acylthioester. The present invention, wherein expensive acyl CoA is reproduced 10 nonenzymatically in a reaction system, enables to continuously carry out acyltransferase reaction only by putting a small amount of acyl CoA with a donor and a receptor of an acyl group into a system. Accordingly, the method of the present invention can be applied to an industrial production method of various 15 kinds of compounds including useful biological molecules and synthesis of polymers such as polyester.